

## P A T E N T     C L A I M S

1. A decanter centrifuge with a hollow drum having a longitudinal axis of rotation and a direction of rotation (6), a screw conveyor in the drum comprising a core body (1) carrying at least one helical winding (2), wherein an inlet chamber (3) is provided in the core body (1), said inlet chamber having an inlet opening (5) for inlet of material into the drum from the inlet chamber (3), a central inlet (4) being provided in the inlet chamber (3) as well as an end wall (13) in the inlet chamber (3) opposite the central inlet (4), the inlet opening (5) having a delimitation surface (7), which is rear relative to the direction of rotation and extending substantially axially, said delimitation surface being provided with a wear reinforcement (8), and a preferably substantially tangentially extending edge (13a), which is distal relative to the central inlet (4), c h a r a c t e r i z e d in that the wear reinforcement comprises a wear reinforcement member (8) extending along the rear delimitation surface (7) and, when viewed in section transverse to the direction of the axis of rotation (6), extending around the rear delimitation surface (7), the wear reinforcement member (8) extending so far into the inlet chamber (3) along its wall that a concave back surface of the wear reinforcement member (8) facing the rear delimitation surface (7) has an interior portion (14) in the inlet chamber, said portion being positioned behind the foremost point (15) of the rear delimitation surface (7) viewed relative to the direction of rotation (6), that the wear reinforcement member (8) is provided with an abutment

surface (11a; 19a) with a component (11b; 19b) facing tangentially opposite the back surface in abutment against an abutment surface associated with the core body (1) and which during operation prevents the wear reinforcement member (8) from moving tangentially forwards in the direction of rotation (6), and an abutment surface (19c) with a radially outwards facing component (19d) in abutment against an abutment surface associated with the core body (1) preventing the wear reinforcement member (8) from moving radially out of the core body (1), that at least one of said abutment surfaces associated with the core body (1) is constituted by a removable blocking member (17) and that the wear reinforcement member (8) and the inlet opening (5) are designed in such a manner that the wear reinforcement member (8) can be introduced to its operating position from the exterior side of the core body (1).

2. A decanter centrifuge according to claim 1, characterized in that the blocking member (17) protrudes from the end wall (13) beyond a part of the wear reinforcement member (8).

3. A decanter centrifuge according to claim 1 or 2, characterized in that the wear reinforcement member (8) comprises at least one end portion (11) extending along an end wall (13) of the inlet chamber (3), said end wall extending from the distal edge (13a).

4. A decanter centrifuge according to claim 3, characterized in that the wear reinforcement member (8) comprises a second end portion (12) at the opposite end relative to the first end portion (11), said second end portion (12)

extending along a proximal wall (9) in the inlet chamber (3), the wear reinforcement member (8) extending between the end wall (13) and the proximal wall (9).

5        5. A decanter centrifuge according to claim 3 or 4, c h a r a c t e r i z e d in that at least one end portion (11, 12) is accommodated in a recess in the adjacent wall (13, 9).

6. A decanter centrifuge according to claim 5,  
10 c h a r a c t e r i z e d in that in the wall (9, 13) at the end of said recess opposite said rear delimitation surface (7) a deeper recess (16) accommodating the blocking member (17) is provided.

7. A decanter centrifuge according to claims 1-  
15 6, c h a r a c t e r i z e d in that between the wear reinforcement member (9) and the rear delimitation surface (7) a filling material for filling out irregularities is provided.

8. A decanter centrifuge according to claim 7,  
20 c h a r a c t e r i z e d in that the filling material comprises epoxy.

9. A decanter centrifuge according to claim 18,  
c h a r a c t e r i z e d in that the wear reinforcement member (8) is made from a not weldable  
25 material.

10. A decanter centrifuge according to claim 9,  
c h a r a c t e r i z e d in that the wear reinforcement member (8) comprises tungsten carbide.

11. A decanter centrifuge according to claims  
30 1-10, c h a r a c t e r i z e d in that the helical winding (2) extends across an inlet (5) into the drum and that a recess (21) is provided in the helical winding (2) at the inlet (5) to allow replacement of

the wear member (8).

12. A wear member for a decanter centrifuge according to claims 1-11, c h a r a c t e r i z e d in having the shape of a saddle.